## **ABSTRACT**

The invention relates to the use of morpholinonucleosides of formula:

in which  ${\ensuremath{R}}^1$  represents a nucleic base and  ${\ensuremath{R}}^2$  represents a group corresponding to one of the following formulae:

$$-(CH_2)_n-NH_2$$
  $-(CH_2)_n-SH$   
 $-(CH_2)_n-COOH$   $-(CH_2)_n-OH$   
 $-(CH_2)_n-NH-R^3$   $-(CH_2)_n-SR^3$   
 $-(CH_2)_n-CO-R^3$   $-(CH_2)_n-OR^3$ 

in which n is an interger ranging from 1 to 12 and  ${\tt R}^3$  is a group derived from a label, from a protein, from an enzyme, from a fatty acid or from a peptide, as chain terminators in a process of DNA or RNA sequencing by the Sanger method, or for the labelling of DNA or RNA fragments.